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A NEW SUBSTAGE LAMP

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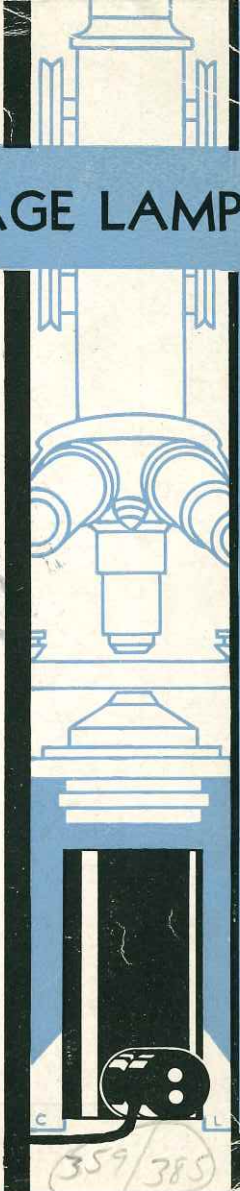
U.S. PATENT OFFICE
FEB 4 - 1952
DIVISION VII



Bausch & Lomb

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SIX POINTS OF SUPERIORITY

A NEW Substage Microscope Lamp, small in size and powerful in illumination, and now offered by Bausch & Lomb Optical Co., has a distinct point of advantage over all other microscope lamps. This advantage lies in this new lamp's ability to completely fill the condenser aperture with light, sufficiently intense for use with a 2 mm oil immersion objective.

Having an illuminated area of 32 mm diameter at a distance of 30 mm from the iris diaphragm of the condenser, this lamp will give an illuminated area upon the object of 6 mm diameter, making possible the use of a 32 mm or higher power objective as a searcher without any change in the condenser. As you well know, if this was to be accomplished from daylight illumination one would require a pane of glass in a window 4½ x 4½ feet square, free from bars, and an unobstructed view to the sky.

Consisting of a cylindrical metal casting, this new lamp has a stem to attach it to the model FFS microscope in place of the mirror fork. Internally it is cone shape with a 6-volt 6-candle power lamp (which uses

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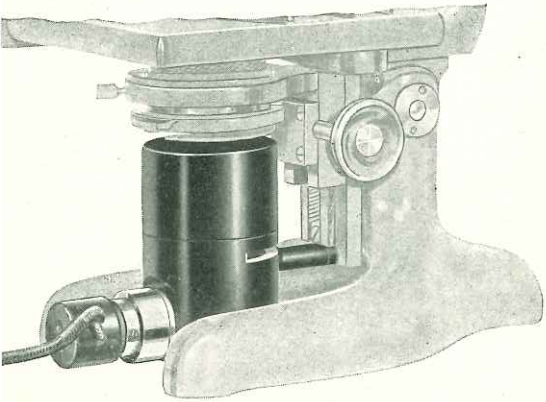
very little power) set near the apex of the cone which so distributes and reflects the light as to fully illuminate a ground blue glass evenly over a field of about 32 mm diameter.

A detachable shade is provided which may be placed between the lamp and the iris diaphragm of the Abbe condenser.

As the light is attached to the mirror bar, it requires no centering and moves with the microscope. The microscope may thus be used upright, inclined or even reversed so as to give free access to the stage, object, etc.



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One to four lamps may be used in parallel on transformer No. 1847, or one to sixteen lamps on transformer No. 1497, either of which is for use on 110-volt alternating current.

A fixed rheostat, No. 1882, can be furnished for use on both 110-volt A.C. and D.C.

Summarizing, you will find that the new Bausch & Lomb Substage Lamp has five definite advantages, as follows:

1—It is always in proper position when in use—no centering is necessary.

2—The condenser aperture is completely filled with light—giving an evenly illuminated area large enough for use with 32 mm objective and intense enough for 2 mm objective.

3—It is economical of current and bulbs—using only 6-candle power (6-volt.)

4—The ground blue glass gives forth a white light—thus the specimen is given its true color value.

5—The lamp is small in size.

6—Powerful in illumination.

Code Word	Cat. No.	Specifications	Price
Afbut	1779T	Microscope Lamp, with No. 1847 Transformer, 110 v.....	$12.00
Afcap	1779R	Microscope Lamp, with No. 1882 Rheostat, 110v	12.00
Afcer	1780	6 volt, 6 candle power bulb	.20

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